



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/763,115

01/22/2004

Roy K. Lim

PC883.00/4906-017

6097

24112 7590 05/15/2007
COATS & BENNETT, PLLC
1400 Crescent Green, Suite 300
Cary, NC 27518

EXAMINER

PRIDDY, MICHAEL B

ART UNIT

PAPER NUMBER

3733

MAIL DATE

DELIVERY MODE

05/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/763,115	Applicant(s) LIM, ROY K.	
	Examiner Michael B. Priddy	Art Unit 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) 47-61 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 42-45 is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5, 7, 11, 20-25, 27, 29, 31, 32, 37, 38 & 46 is/are rejected.
- 7) ☒ Claim(s) 2, 6, 8-10, 12-19, 26, 28, 30, 33-36 and 39-41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20040507, 20050103 & 20051214</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of invention I, claims 1-46 in the reply filed on 04/05/2007 is acknowledged.

Claims 47-61 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not *properly* state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

The present Oath includes the statement "I acknowledge the duty to disclose information which is material the patentability of this application in accordance with 37 C.F.R. 1.56(a)."

The statement should read, "I acknowledge the duty to disclose information which is material to patentability of this application in accordance with **37 C.F.R. 1.56.**"

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 4 requires the first contact surface and the second exterior contact surface form an acute angle in the second orientation. This requirement does not seem to have proper antecedent basis in the specification.

Claim Objections

Claim 41 is objected to because of the following informalities: in line 1, "37" should be --40--. Appropriate correction is required.

Claim 42 is objected to because of the following informalities: in line 7, "a" should be deleted. Appropriate correction is required.

Claim 46 is objected to because of the following informalities: in line 12, "axial movable" should be --axially movable--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 recites the limitation "the first exterior contact side" in lines 3 and 8-9. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

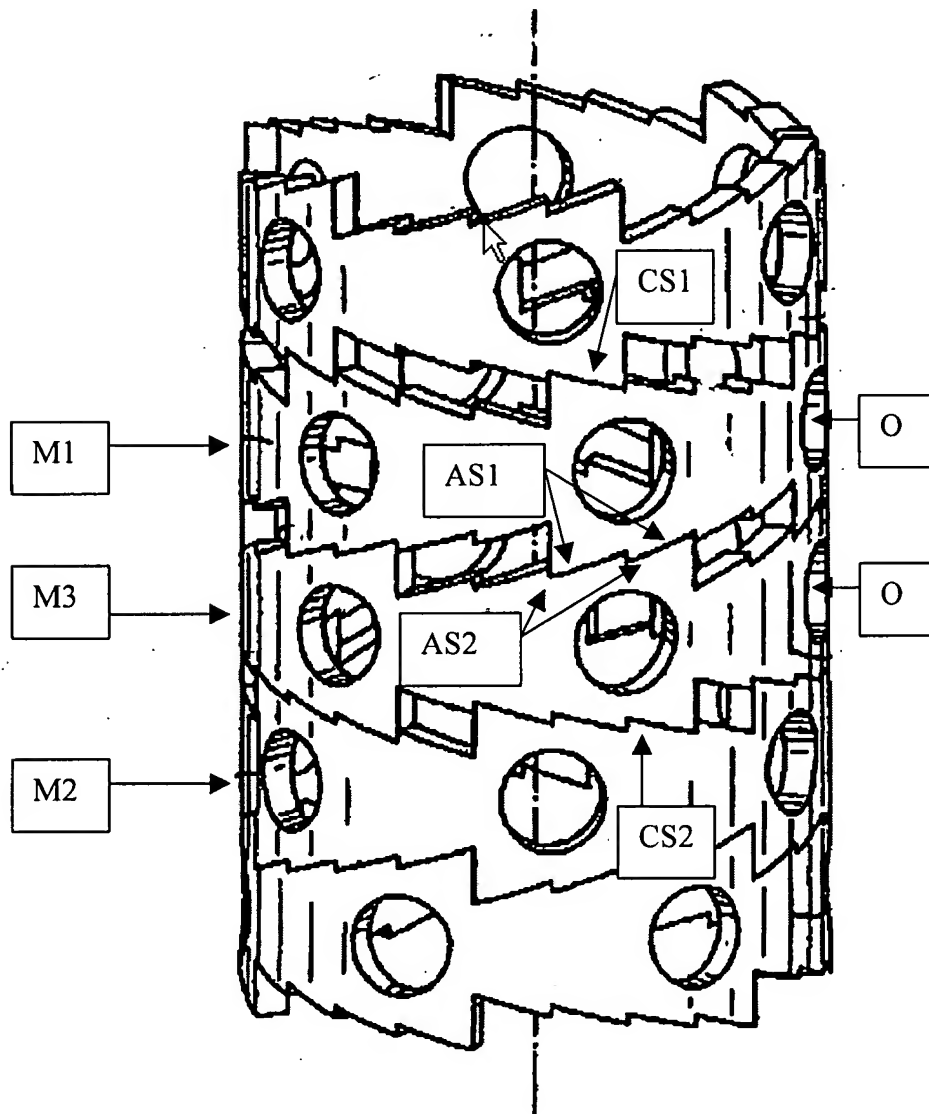
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 11, 20, 25, 27, 29, 31 are rejected under 35 U.S.C. 102(a) as being anticipated by Conchy (FR 2,817,463) with reference to the figure below. Conchy teaches a device to space vertebral members comprising: a first member M1 having an interior side with first and second angled sections AS1 and an exterior side with a first contact surface CS1; a second member M2 having a second interior side and a second exterior contact surface CS2; a third member positioned between the first member and the second member, the third member M3 having a first side with first and second angled sections AS2 positioned towards the angled sections AS1 of the first member M1, and a second side positioned towards the interior surface of the second member M2, the device positionable between a first orientation with the angled sections of the first member disengaged from the angled sections of the third member M3 and having a first height extending between the first contact surface CS1 and the second contact surface CS2, and a second orientation (shown) having the angled sections AS1 of the

Art Unit: 3733

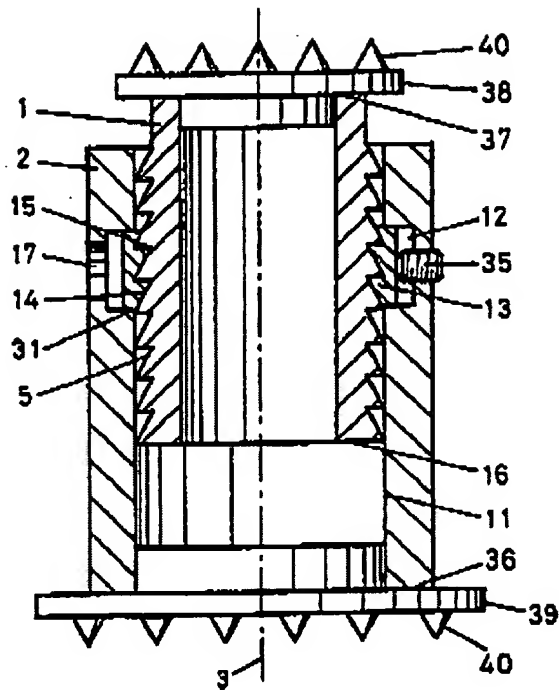
first member M1 engaged with the angled sections AS2 of the second member M2 and having a second height between the first contact surface CS1 and the second contact surface CS2, with the second height being greater than the first height.



Claims 1, 3, 5, 7, 11, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Schär et al. (US 6,176,881) with reference to the figure below. Schär et

Art Unit: 3733

al. teach a device to space vertebral members comprising: a first member 1 having an interior side with a plurality of first angled sections 5 and an exterior side 38 with a first contact surface; a second member 2 having a second interior side and a second exterior contact surface 39; a third member 13 positioned between the first member 1 and the second member 2, the third member 13 having a first side with a plurality of second angled sections 14 positioned towards the first angled sections 5, and a second side positioned towards the interior surface of the second member 2; the device positionable between a first orientation with the first angled section disengaged from the second angled section and having a first height extending between the first contact surface 38 and the second contact surface 39, and a second orientation having the first angled sections engaged with the second angled sections and having a second height between the first contact surface 38 and the second contact surface 39, with the second height being greater than the first height; wherein the first contact surface 38 and the second exterior contact surface 39 are substantially parallel in the first orientation; further comprising a locking mechanism 35 extending outward from the third member 13 and having at least one extension that mounts within an aperture 17 in the second member 2 when the device is positioned at the second orientation; wherein the second member 2 is positioned towards a proximal end of the first member 1 in the first position, and positioned towards a distal end of the first member 1 in the second position.



Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 32, 37, 38 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conchy (With reference to the aforementioned figure) in view of Brantigan (US 4,787,915). Conchy teaches a device to space vertebral members comprising: a first member M1 and a second member M2 each having an exterior side CS1/2 and an interior side, the interior sides having ramped surfaces AS1/2 positioned at an angle relative to the exterior sides, the device positionable between a first

Art Unit: 3733

orientation with the ramped surfaces AS1/2 disengaged and having a first height extending between the exterior surfaces CS1/2, and a second orientation (shown) having the ramped surfaces AS1/2 engaged and having a second height between the exterior surfaces CS1/2, with the second height being greater than the first height.

Hence Conchy teaches all of the limitations of the present invention except a delivery device connected to at least one of the first and second members and having an elongated shape to position the device between the vertebral members; and a deployer operatively connected to one of the first and second members to give movement of the first member relative to the second member.

Brantigan teaches a delivery device 28 having an elongated shape to position a spacing device between vertebral members and a deployer 25. It would have been obvious to one having ordinary skill in the art at the time of the present invention to use the delivery device 28 and deployer 25 to engage the first M1 and second members M2 at openings O. Using the delivery device 28 and deployer 25 of Brantigan would have facilitated implantation of the device taught by Conchy and relative movement of its elements particularly when compared with manipulation directly with the surgeon's hands.

Allowable Subject Matter

Claims 42-45 are allowed.

Claims 2, 6, 8-10, 12-19, 26, 28, 30, 33-36, 39 and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in

independent form including all of the limitations of the base claim and any intervening claims.

Claim 41 would be allowable if rewritten to overcome the objection set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 22-24 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael B. Priddy whose telephone number is 571-272-2243. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael B. Priddy

Michael B. Priddy
May 4, 2007


EDUARDO C. ROBERT
SUPERVISORY PATENT EXAMINER